

#5

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 | 523,503
Source: PCT
Date Processed by STIC: 2-17-05

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PCT

RAW SEQUENCE LISTING

DATE: 02/17/2005

PATENT APPLICATION: US/10/523,503

TIME: 11:21:43

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3 <110> APPLICANT: BASF PLANT SCIENCE GMBH
5 <120> TITLE OF INVENTION: SUGAR AND LIPID METABOLISM REGULATORS IN PLANTS IV
7 <130> FILE REFERENCE: 16313-0236
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/523,503
C--> 10 <141> CURRENT FILING DATE: 2005-02-02
12 <150> PRIOR APPLICATION NUMBER: US 60/400,803
13 <151> PRIOR FILING DATE: 2002-08-02
15 <160> NUMBER OF SEQ ID NOS: 163
17 <170> SOFTWARE: PatentIn version 3.2
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 300
21 <212> TYPE: DNA
22 <213> ORGANISM: Arabidopsis thaliana
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29 tgcggtggga gatgcaaagg tagatgcagc aaatcgtcga ggccaaatct gtgtttgaga      180
31 gcatgcaaca gctgttgta cgcgtgcaac tgtgtgccac caggcaccgc cggaaccac      240
33 cacctttgtc cttgctacgc ctccattacc actcgtggtg gccgtctcaa gtgcccttaa      300
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38 <212> TYPE: PRT
39 <213> ORGANISM: Arabidopsis thaliana
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46 Leu Thr Thr Phe Glu Leu His Val His Ala Ala Glu Asp Ser Gln Val
47          20          25          30
50 Gly Glu Gly Val Val Lys Ile Asp Cys Gly Gly Arg Cys Lys Gly Arg
51          35          40          45
54 Cys Ser Lys Ser Ser Arg Pro Asn Leu Cys Leu Arg Ala Cys Asn Ser
55          50          55          60
58 Cys Cys Tyr Arg Cys Asn Cys Val Pro Pro Gly Thr Ala Gly Asn His
59 65          70          75          80
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66 Lys Cys Pro
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71 <211> LENGTH: 1245
72 <212> TYPE: DNA
73 <213> ORGANISM: Arabidopsis thaliana
75 <400> SEQUENCE: 3
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78 atggaaagca tcacaacaga ggaagatgaa ggaggaaaga gagtaatatc tctgggaatg 120
80 ggagacccaa cactctactc gtgttttcgt acaacacaag tctctcttca agctgtttct 180
82 gattctcttc tctccaacaa gttccatggt tactctccta ccgtcgggtc tccccaagct 240
84 cgaagggcaa tagcagagta tctatcgct gatcttccat acaaactttc acaggatgat 300
86 gtgtttatca catcgggttg cagcaagcg atcgatgtag cattgtcgat gttagctcgt 360
88 cccagggcta atatacttct tccaaggcct ggtttcccaa tctatgaact ctgtgctaag 420
90 tttagacacc ttgaagttcg ctacgtcgat cttcttcggg aaaatggatg ggagatcgat 480
92 cttgatgctg tcgaggctct tgcagacgaa aacacgggtg ctttggttgt tataaacctt 540
94 ggtaatcctt gcgggaatgt ctatagctac cagcatttga tgaagattgc ggaatcggcg 600
96 aaaaaactag ggtttcttgt gattgctgat gaggtttacg gtcattctgc ttttggtagc 660
98 aaaccgtttg tgccaatggg tgtgtttgga tctattgttc ctgtgcttac tcttggtctt 720
100 ttatcaaaga gatggatagt tccagggttg cgactcgggt ggtttgtcac cactgacctt 780
102 tctggttcct ttaaggaccc taagatcatt gagaggttta agaaataact tgatattctt 840
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110 gttaagctga atctctcatt acttgaagat gtaagtgcg atatcgactt ctgtttcaag 1080
112 ttagctaggg aagaatcagt catccttctt cctgggaccg cgggtggggt gaagaactgg 1140
114 ctgaggataa cgtttgacgc agatgcaact tcgattgaag aagcttttaa aaggatcaaa 1200
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121 <212> TYPE: PRT

122 <213> ORGANISM: Arabidopsis thaliana

124 <400> SEQUENCE: 4

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130 20 25 30
133 Lys Arg Val Ile Ser Leu Gly Met Gly Asp Pro Thr Leu Tyr Ser Cys
134 35 40 45
137 Phe Arg Thr Thr Gln Val Ser Leu Gln Ala Val Ser Asp Ser Leu Leu
138 50 55 60
141 Ser Asn Lys Phe His Gly Tyr Ser Pro Thr Val Gly Leu Pro Gln Ala
142 65 70 75 80
145 Arg Arg Ala Ile Ala Glu Tyr Leu Ser Arg Asp Leu Pro Tyr Lys Leu
146 85 90 95
149 Ser Gln Asp Asp Val Phe Ile Thr Ser Gly Cys Thr Gln Ala Ile Asp
150 100 105 110
153 Val Ala Leu Ser Met Leu Ala Arg Pro Arg Ala Asn Ile Leu Leu Pro
154 115 120 125
157 Arg Pro Gly Phe Pro Ile Tyr Glu Leu Cys Ala Lys Phe Arg His Leu
158 130 135 140
161 Glu Val Arg Tyr Val Asp Leu Leu Pro Glu Asn Gly Trp Glu Ile Asp
162 145 150 155 160
165 Leu Asp Ala Val Glu Ala Leu Ala Asp Glu Asn Thr Val Ala Leu Val
166 165 170 175
169 Val Ile Asn Pro Gly Asn Pro Cys Gly Asn Val Tyr Ser Tyr Gln His
170 180 185 190

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173 Leu Met Lys Ile Ala Glu Ser Ala Lys Lys Leu Gly Phe Leu Val Ile
174      195      200      205
177 Ala Asp Glu Val Tyr Gly His Leu Ala Phe Gly Ser Lys Pro Phe Val
178      210      215      220
181 Pro Met Gly Val Phe Gly Ser Ile Val Pro Val Leu Thr Leu Gly Ser
182 225      230      235      240
185 Leu Ser Lys Arg Trp Ile Val Pro Gly Trp Arg Leu Gly Trp Phe Val
186      245      250      255
189 Thr Thr Asp Pro Ser Gly Ser Phe Lys Asp Pro Lys Ile Ile Glu Arg
190      260      265      270
193 Phe Lys Lys Tyr Phe Asp Ile Leu Gly Gly Pro Ala Thr Phe Ile Gln
194      275      280      285
197 Ala Ala Val Pro Thr Ile Leu Glu Gln Thr Asp Glu Ser Phe Phe Lys
198      290      295      300
201 Lys Thr Leu Asn Ser Leu Lys Asn Ser Ser Asp Ile Cys Cys Asp Trp
202 305      310      315      320
205 Ile Lys Glu Ile Pro Cys Ile Asp Ser Ser His Arg Pro Glu Gly Ser
206      325      330      335
209 Met Ala Met Met Val Lys Leu Asn Leu Ser Leu Leu Glu Asp Val Ser
210      340      345      350
213 Asp Asp Ile Asp Phe Cys Phe Lys Leu Ala Arg Glu Glu Ser Val Ile
214      355      360      365
217 Leu Leu Pro Gly Thr Ala Val Gly Leu Lys Asn Trp Leu Arg Ile Thr
218      370      375      380
221 Phe Ala Ala Asp Ala Thr Ser Ile Glu Glu Ala Phe Lys Arg Ile Lys
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226      405      410

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229 <210> SEQ ID NO: 5

230 <211> LENGTH: 459

231 <212> TYPE: DNA

232 <213> ORGANISM: Arabidopsis thaliana

234 <400> SEQUENCE: 5

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239 ccattctgaag ataaaacgac gactgtttgg ctaactaaaa tcaaacgggc cggtaaaaat      180
241 tattgggcta aagttagaga gactttggat cgtggacagt cccacttctt tcctccgaac      240
243 acatatttta ccgaaagaa tgatgcgccg atgggagccg gtgaaaatat gaaagaggcg      300
245 gcgacgagga gctttgagca tagcaaagcg acggtggagg aagctgctag atcagcggca      360
247 gaagtggtag gtgatacggc ggaagctgtg aaagaaaagg tgaagaggag cgtttccggt      420
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252 <210> SEQ ID NO: 6

253 <211> LENGTH: 152

254 <212> TYPE: PRT

255 <213> ORGANISM: Arabidopsis thaliana

257 <400> SEQUENCE: 6

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258 Met Ala Glu Lys Val Lys Ser Gly Gln Val Phe Asn Leu Leu Cys Ile
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262 Phe Ser Ile Phe Phe Phe Leu Phe Val Leu Ser Val Asn Val Ser Ala

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266 Asp Val Asp Ser Glu Arg Ala Val Pro Ser Glu Asp Lys Thr Thr Thr
267          35          40          45
270 Val Trp Leu Thr Lys Ile Lys Arg Ser Gly Lys Asn Tyr Trp Ala Lys
271          50          55          60
274 Val Arg Glu Thr Leu Asp Arg Gly Gln Ser His Phe Phe Pro Pro Asn
275 65          70          75          80
278 Thr Tyr Phe Thr Gly Lys Asn Asp Ala Pro Met Gly Ala Gly Glu Asn
279          85          90          95
282 Met Lys Glu Ala Ala Thr Arg Ser Phe Glu His Ser Lys Ala Thr Val
283          100          105          110
286 Glu Glu Ala Ala Arg Ser Ala Ala Glu Val Val Ser Asp Thr Ala Glu
287          115          120          125
290 Ala Val Lys Glu Lys Val Lys Arg Ser Val Ser Gly Gly Val Thr Gln
291          130          135          140
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299 <211> LENGTH: 1158
300 <212> TYPE: DNA
301 <213> ORGANISM: Arabidopsis thaliana
303 <400> SEQUENCE: 7
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308 ttcgctcgag ttttagcatg gggttatcaa acaatccaac caccaccgcg caaaatcgtc 180
310 ggctctcccc gtggaccac cgtgacatca ccgaggatca aactgagaga cggaagacat 240
312 ctggcttaca cagaattcgg aatccctaga gacgaagcca agttcaagat cataaacatc 300
314 cacggcttcg attcttgtat gcgagactcg catttcgcca atttcttata gccggctctt 360
316 gtggaggaat tgaggatata catttgtgtc tttgatcgtc ctggttatgg agagagtgat 420
318 cctaacctga atgggtcacc aagaagcata gcattggata tagaagagct tgctgatggg 480
320 ttaggactag gacctcagtt ctatctcttt ggttactcca tgggtggtga aattacatgg 540
322 gcatgcctta actacattcc tcacaggtta gcaggagctg cccttgtagc tccagcgatt 600
324 aactattggt ggagaaactt accgggagat ttaacaagag aagctttctc tcttatgcat 660
326 cctgcagatc aatggtcact tcgagtagct cattatgctc cttggcttac atattggtgg 720
328 aacactcaga aatggttccc aatctccaat gtgattgccg gtaatcccat tattttctca 780
330 cgtcaggaca tggagatctt gtcgaagctc ggattcgta atccaaatcg ggcatacata 840
332 agacaacaag gtgaatatgt aagcttacac cgagatttga atgtcgcat ttcaagctgg 900
334 gagtttgatc cgttagacct tcaagatccg ttcccgaaca acaatggctc agttcacgta 960
336 tggaatggcg atgaggataa gtttgtgcca gtaaagcttc aacggtatgt cgcgtcaaag 1020
338 ctgccatgga ttcgttacca tgaaatatct ggatcaggac attttgtacc atttgtggaa 1080
340 ggtatgactg ataagatcat caagtcactt ttggttgggg aagaagatgt aagtgaagat 1140
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345 <210> SEQ ID NO: 8
346 <211> LENGTH: 385
347 <212> TYPE: PRT
348 <213> ORGANISM: Arabidopsis thaliana
350 <400> SEQUENCE: 8
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352 1          5          10          15

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355 Arg Thr His Thr Arg Asn Asn Thr Gln Gln Ser Ser Ser Ser Gly Tyr
356          20          25          30
359 Leu Lys Thr Leu Leu Leu Val Thr Phe Val Gly Val Leu Ala Trp Val
360          35          40          45
363 Tyr Gln Thr Ile Gln Pro Pro Pro Ala Lys Ile Val Gly Ser Pro Gly
364          50          55          60
367 Gly Pro Thr Val Thr Ser Pro Arg Ile Lys Leu Arg Asp Gly Arg His
368 65          70          75          80
371 Leu Ala Tyr Thr Glu Phe Gly Ile Pro Arg Asp Glu Ala Lys Phe Lys
372          85          90          95
375 Ile Ile Asn Ile His Gly Phe Asp Ser Cys Met Arg Asp Ser His Phe
376          100          105          110
379 Ala Asn Phe Leu Ser Pro Ala Leu Val Glu Glu Leu Arg Ile Tyr Ile
380          115          120          125
383 Val Ser Phe Asp Arg Pro Gly Tyr Gly Glu Ser Asp Pro Asn Leu Asn
384          130          135          140
387 Gly Ser Pro Arg Ser Ile Ala Leu Asp Ile Glu Glu Leu Ala Asp Gly
388 145          150          155          160
391 Leu Gly Leu Gly Pro Gln Phe Tyr Leu Phe Gly Tyr Ser Met Gly Gly
392          165          170          175
395 Glu Ile Thr Trp Ala Cys Leu Asn Tyr Ile Pro His Arg Leu Ala Gly
396          180          185          190
399 Ala Ala Leu Val Ala Pro Ala Ile Asn Tyr Trp Trp Arg Asn Leu Pro
400          195          200          205
403 Gly Asp Leu Thr Arg Glu Ala Phe Ser Leu Met His Pro Ala Asp Gln
404          210          215          220
407 Trp Ser Leu Arg Val Ala His Tyr Ala Pro Trp Leu Thr Tyr Trp Trp
408 225          230          235          240
411 Asn Thr Gln Lys Trp Phe Pro Ile Ser Asn Val Ile Ala Gly Asn Pro
412          245          250          255
415 Ile Ile Phe Ser Arg Gln Asp Met Glu Ile Leu Ser Lys Leu Gly Phe
416          260          265          270
419 Val Asn Pro Asn Arg Ala Tyr Ile Arg Gln Gln Gly Glu Tyr Val Ser
420          275          280          285
423 Leu His Arg Asp Leu Asn Val Ala Phe Ser Ser Trp Glu Phe Asp Pro
424          290          295          300
427 Leu Asp Leu Gln Asp Pro Phe Pro Asn Asn Asn Gly Ser Val His Val
428 305          310          315          320
431 Trp Asn Gly Asp Glu Asp Lys Phe Val Pro Val Lys Leu Gln Arg Tyr
432          325          330          335
435 Val Ala Ser Lys Leu Pro Trp Ile Arg Tyr His Glu Ile Ser Gly Ser
436          340          345          350
439 Gly His Phe Val Pro Phe Val Glu Gly Met Thr Asp Lys Ile Ile Lys
440          355          360          365
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444          370          375          380
447 Val
448 385
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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/523,503

DATE: 02/17/2005

TIME: 11:21:44

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L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date